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EXAMINER

WAXMAN, ANDREW

ART UNIT PAPER NUMBER

2662

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/371,983

Applicant(s)

KING, NIGEL J R

Examiner

Andrew M Waxman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/11/99 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "22" and "32" have both been used to designate the local exchange. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 10 refers to the "method according to claim 7" (see claim 10 line 1), this renders claim 10 indefinite because claim 7 defines a "fixed wireless access system" (see claim 7 line 1), not a method.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 7, and 8 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Yamada et al., Patent Number 5,598,416, herein after referred to as Yamada. Yamada discloses

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a communication system with a plurality of user stations (“plurality of terminals” see col. 5 line 58) capable of communicating via respective user channels with a base station having limited data traffic capacity, coding means for encoding data at a plurality of preset data rates and the ability to monitor the amount of data traffic (“reduce an information transmission rate...” see col. 6 lines 10-25). The system also includes means, at the base station, to reduce the data rate thereby to increase the number of user channels available (“a reduction of an information transmission rate or a source encoding rate” see col. 2 lines 5-6).

Regarding claim 3, Yamada discloses all of the limitations discussed in claim 1 above further defining the coding means at the user station and base station capable of operating at a plurality of different data rates (“reduce an information transmission rate...” see col. 6 lines 10-12 and “reduce a source encoding rate...” see col. 6 lines 18-19) where both the user and base station data rates are equal (“first information transmission rate to a second information transmission rate” and “first source encoding rate to a second source encoding rate” see col. 6 lines 12-14 and 19-20).

Regarding claim 7, Yamada discloses a communication system with a plurality of user stations (“plurality of terminals” see col. 5 line 58) capable of communicating via respective user channels with a base station having limited data traffic capacity, coding means for encoding data at a plurality of preset data rates and the ability to monitor the amount of data traffic (“reduce an information transmission rate...” see col. 6 lines 10-25). The system also includes means, at the base station, to reduce the data rate thereby to increase the number of user channels available (“a reduction of an information transmission rate or a source encoding rate” see col. 2 lines 5-6). It is well known to someone of ordinary skill in the art that a wireless medium is commonly used

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as a medium for transmitting voice and data, in turn the wireless system described in claim 7 is the an embodiment of the communication system disclosed by Yamada.

Regarding claim 8, as discussed above with respect to claim 1, Yamada discloses a communication system with a plurality of user stations ("plurality of terminals" see col. 5 line 58) capable of communicating via respective user channels with a base station having limited data traffic capacity, coding means for encoding data at a plurality of preset data rates and the ability to monitor the amount of data traffic ("reduce an information transmission rate..." see col. 6 lines 10-25). The system also includes means, at the base station, to reduce the data rate thereby to increase the number of user channels available ("a reduction of an information transmission rate or a source encoding rate" see col. 2 lines 5-6). The method for controlling defined in claim 8 enable the communication system defined in claim 1. Since the elements of the system are described in Yamada, the claimed method to operate the system are inherent to Yamada since they are necessary to carry operate and make use of the system.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 4, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada in view of Battin et al., Patent Number 5,649,299, herein referred to as Battin. Yamada discloses all of the limitations as discussed above in reference to claim 1. Yamada does not expressly disclose coding means to operate at the same data rates in the uplink and downlink directions. Battin discloses a communication system with equal data rates in the uplink and downlink direction ("the conversion rates..." see col. 1 lines 49-52). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to include means for encoding data at a plurality of different data rates, identical in the uplink and downlink directions in Yamada's system, as suggested by Battin. One of ordinary skill in the art would have been motivated to do this because it would satisfy the compatibility requirements for a digital radiotelephone system which states that whatever rate is used in the analog to digital processing, must be matched in the corresponding digital to analog processing. This enables the invention to make use of digital technologies to increase the capacity of the transmission system making the system more attractive and profitable.

Referring to claim 4, Yamada teaches all of the limitations as discussed above with respect to claim 1. Yamada does not expressly disclose monitoring means with the ability to control the coding data rates in the uplink and downlink directions. Battin discloses a communication system with monitoring means able to control the coding data rates in the uplink and downlink direction ("a radio transceiver..." see col. 7 lines 27-35). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to include monitoring means which are able to control the coding means in both the uplink and downlink directions in Yamada's system, as suggested by Battin. One of ordinary skill in the art would

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have been motivated to do this because it would combine two operations, control of uplink data rates and control of downlink data rates, into one location reducing the elements in the system and reducing the amount of elements with the ability to fail.

Regarding claim 9, Yamada teaches all of the limitations as discussed above with respect to claim 2. Yamada does not expressly disclose monitoring means with the ability to control the coding data rates in the uplink and downlink directions. Battin discloses a communication system with monitoring means able to control the coding data rates in the uplink and downlink direction ("a radio transceiver..." see col. 7 lines 27-35). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to include monitoring means which are able to control the coding means in both the uplink and downlink directions in Yamada's system, as suggested by Battin. One of ordinary skill in the art would have been motivated to do this because it would combine two operations, control of uplink data rates and control of downlink data rates, into one location reducing the elements in the system and reducing the amount of elements with the ability to fail. The method for controlling defined in claim 9 enables the communication system defined in claim 2. Since the elements of the system are described in Yamada, the claimed method to operate the system are inherent to Yamada since they are necessary to carry operate and make use of the system.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada in view of Hamalainen et al., Patent Number 6,240,079, herein after referred to as Hamalainen. Yamada discloses all of the limitations as discussed above in reference to claim 1. Yamada does not expressly disclose the monitoring means within the communication system having the ability to change the data rate during a call. Hamalainen discloses a method for relieving the congestion

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problems in a network by dynamically changing the data transfer rate of a data call depending on the resources of the network ("the data transfer rate..." see col. 2 lines 40-42). At the time the invention was made it would have been obvious to one of ordinary skill in the art to include the ability to dynamically change the coding data rate of a data call in Yamada's system, as suggested by Hamalainen. One of ordinary skill in the art would have been motivated to do this because the system would be able to actively adjust the coding data rates of data calls allowing for better data traffic management and in turn a more marketable product.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada in view of Battin and Widegren et al., Patent Number 6,374,112, herein after referred to as Widegren. With respect to claim 4 as discussed above, Yamada teaches all of the limitations as discussed above with respect to claim 1. Yamada does not expressly disclose monitoring means with the ability to control the coding means to apply different data rates in the uplink and downlink directions. Battin discloses a communication system with monitoring means able to control the coding data rates in the uplink and downlink direction ("a radio transceiver..." see col. 7 lines 27-35), and Widegren discloses a communication system with the ability to use different coding rates in the uplink and downlink directions ("different uplink and downlink...traffic parameters" see col. 8 lines 65-66). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to include monitoring means which are able to control the coding means to apply different coding data rates in both the uplink and downlink directions in Yamada's system, as suggested by Battin and Widegren. One of ordinary skill in the art would have been motivated to do this because it would combine two operations, control of uplink data rates and control of downlink data rates, into one location reducing the elements in the system and



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reducing the amount of elements with the ability to fail. Furthermore the inclusion would provide a more efficient management of data traffic in the uplink, point-to-multipoint, and downlink, multipoint-to-point, directions.

### *Conclusion*

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chiussi et al., Patent Number 5,701,292, discloses a method and apparatus for controlling data transfer rates of data sources in ATM networks.

Moulsley, Patent Number 6,407,993, discloses a flexible two-way telecommunication system.

Wallentin et al., Patent Number 6,347,091, discloses a method and apparatus for dynamically adapting a connection state in a mobile communications system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew M Waxman whose telephone number is (703) 305-8086. The examiner can normally be reached on 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (703) 305-4744. The fax phone numbers for the organization where this application or proceeding is assigned are 1 for regular communications and 1 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 1.

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Andrew M Waxman

Examiner

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AMW

August 21, 2002



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